

WHAT IS CLAIMED IS:

1. An image sensing apparatus comprising:  
an image sensing unit having a non-destructive  
read function, adapted to an object image; and  
5 a subtractor circuit adapted to sequentially  
output a plurality of corrected values, wherein each of  
said plurality of corrected values is a difference  
between a first frame included in a plurality of frames  
sequentially read out non-destructively from said image  
10 sensing unit and a second frame included in said  
plurality of frames, read out before the first frame.

2. An image sensing apparatus according to claim  
1, further comprising a driver circuit including a  
15 comparator circuit for comparing the output value read  
out from said image sensing unit with a reference  
value, said driver circuit changing a read mode of said  
image sensing unit to a normal read mode if the output  
value exceeds the reference value, wherein the normal  
20 read mode resets said image sensing unit and reads out  
a signal after the reset.

3. An image sensing apparatus according to claim  
1, wherein said image sensing unit has pixel portions  
25 each including a photoelectric conversion element and  
a transistor for reading, the photoelectric element of  
the pixel portion being connected to a control terminal

of said transistor.

4. An image sensing apparatus according to claim  
3, wherein a load is connected to one non-control  
5 terminal of said transistor and constitutes an  
amplifier having a voltage gain of about 1.

10 5. An image sensing apparatus according to claim  
4, wherein said load is a constant current source or a  
resistor.

15 6. An image sensing apparatus according to claim  
3, wherein a switching transistor is connected serially  
to said transistor in order to select the pixel  
portions in a row direction.

20 7. An image sensing apparatus according to claim  
2, wherein a transistor for reset is connected serially  
to the photoelectric conversion element, and said  
driver circuit controls said transistor for reset by  
using a mode switching signal to change the read mode  
either to the normal read mode or to the non-  
destructive read mode.

25 8. An image sensing apparatus according to claim  
2, further comprising a memory table for storing  
position information of a defective pixel of said image

sensing unit, wherein said driver circuit does not change the read mode if an output value for the defective value is to be output, by referring to the position information stored in said memory table.

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9. An image sensing apparatus according to claim 2, wherein further comprising a memory table for storing position information of an invalid area other than an image sensing area of said image sensing unit, wherein said driver circuit does not change the read mode if an output value for the invalid area is to be output, by referring to the position information stored in said memory table.

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10. An image sensing apparatus according to claim 2, further comprising a counter connected to an output portion of the comparator circuit, wherein said counter counts the number of times when the output value read out from said image sensing unit exceeds the reference value, and said driver circuit changes the read mode from the non-destructive read mode to the normal read mode when the count of said counter reaches a predetermined value.

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11. An image sensing apparatus according to claim 2, further comprising a memory circuit adapted to storing the corrected values for each frame, wherein

for the frame following the normal read mode, a corrected value for the previous frame stored in said memory circuit is output.